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ABSTRACT

This report evaluates the third year of the Appalachian Adolescent Health Education Project (AAHEP), a program designed to reduce adolescent pregnancy rates and provide care for pregnant teenagers in East Tennessee. The report notes that the project's scope changed from a 15-county region to a concentration of efforts in 3 target counties for the care component and 7 target high schools in 2 additional counties for the prevention component, with the additional 10 counties receiving less service. Evaluation design and project focus changes are also reported: federally-requested hypotheses replaced AAHEP goals and objectives as project guides and three control counties were added for comparison data. The report includes the new hypotheses, context information, a plan for the next year, care component results, prevention results and sections on management and general comments, issues, and discussion, progress information, dissemination, and conclusions. The report concludes that AAHEP has succeeded in meeting its care and prevention goals and that its services appear to have reduced the incidence of adolescent births in the target counties. Six tables, six figures, and three appendices are included. (ABB)

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APPALACHIAN ADOLESCENT HEALTH EDUCATION PROJECT (AAHEP)

Third Year Evaluation Report

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APPALACHIAN ADOLESCENT HEALTH EDUCATION PROJECT (AAHEP)
DOUGLAS-CHEROKEE ECONOMIC AUTHORITY (DCEA)
MORRISTOWN, TN
THIRD-YEAR EVALUATION REPORT[1]

Introduction

In October, 1985, the Appalachian Adolescent Health Education Project (AAHEP) ended its third year of operations. AAHEP was developed to provide prevention and care services to pregnant teens and their families in a 15-county, primarily rural area of East Tennessee. Since AAHEP began in October, 1982, it has undergone considerable change and revision based upon needs and outcomes. For example, following the first year of operation, modifications were made in the area served by the AAHEP staff due to the realities of trying to serve such a large area with the limited funds available. Along with limitations in funding, other difficulties were manifested. For example, the evaluators noted that the dispersed nature of the project in this mountainous, rural, Appalachian region at times made service delivery difficult or impossible. Other problems included significant staff turnover (the project now has its third director) and lack of "control" counties for comparison.

Beginning in the second year, the project's scope changed significantly. Rather than serving the entire fifteen-county region the focus was changed to concentrate most of the available resources and staff effort in "target" or "primary" counties. The care component focused its efforts in three counties while the prevention component worked through seven target high schools located in two additional counties. Thus during the second year, the project moved from its fifteen-county focus to maximum service in five primary target counties and less service in the ten other counties termed non-target.

AAHEP, currently in its fourth year of operation, has undergone several changes in evaluation design and project focus. One recent change in evaluation strategies has been the introduction of three "control" counties located in East Tennessee. These three counties, not served by AAHEP, are used for comparison purposes. The three were chosen for their

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similarity and proximity to the 15 AAHEP counties. Throughout the three-year duration of the project, however, the major goals of providing care for pregnant adolescents and prevention of adolescent pregnancy have remained consistent. To accomplish the goals most effectively the project directors and evaluation team developed objectives that the care and prevention components would use for operational guidelines. The map in figure 1 shows the original area, the five "target" counties, and the three control or comparison counties.

Hypotheses

At the end of the 1983-84 year AAHEP Staff, at the request of Federal project personnel, developed several "hypotheses" to guide project operations and evaluation. The "hypotheses" evolved from the prior objectives, from the original proposal design, and from progress to date on project goals. Data collection and formats for 1984-85 have been adjusted to address these hypotheses. The AAHEP hypotheses are:

I. Duration of the project, staff development, and implementation of electronic procedures (mini-computer) will improve the AAHEP management procedures as shown by (1) availability of data, (2) recency or currency of data, (3) ease of reporting and access, and (4) amount and sophistication of dissemination activities.

II. Given the necessary resources, AAHEP will provide prevention services to a minimum of 60% of all targeted adolescents (specifically, those in the seven target school sites who have teenage pregnancies).

III. Within the AAHEP service area there will be a decline in teenage pregnancies (based on baseline data of state of Tennessee). This decline will be related to the number of years of AAHEP activity within the region.

IV. Given adequate resources and procedures for identification, AAHEP will offer their care services to a minimum of 80% of all pregnant adolescents in the three target counties served by AAHEP.

V. Within the AAHEP service region, and specifically within the target or primary counties, the percentage of low birth-weight births to teenage mothers will decline relative to the percentage within the state of Tennessee. (Or relative to similar counties.)

Prior to this third-year report, the evaluation was guided not by "hypotheses," but by AAHEP's goals and objectives. The goal/objective format appears in Appendix A to provide continuity in the transition to the new format.

Figure 1. Map Showing AAHEP Area.
Counties Marked with //// are Control Counties; ##### are
Target Counties (Knox County Not Included in Study)

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Some Context Information (1984-85).

December (1984), January and February (1985), were among the worst winter months ever experienced in Tennessee. Record low temperatures (-24F) were achieved, and unusually heavy snowfalls closed schools for many days. In fact, the Tennessee legislature passed special legislation to give schools a relief from the number of days of school required; even with this, some school systems scheduled attendance on Saturdays to make up lost days. Planned teacher in-service days were cancelled so students could attend school on those days.

During the heavy snows travel was nearly impossible in East Tennessee, and even more so in the mountains and hollows served primarily by AAHEP. It would be understandable if AAHEP services were disrupted to some degree by the inclement weather, not only due to travel problems, but also because schools where AAHEP worked were closed. Regardless of project results, the weather was a limiting factor in East Tennessee in the winter of 1984-85.

During AAHEP's first two years, evaluation was split between a private evaluation contractor and evaluation personnel at the Bureau of Educational and Research Service (BERS), The University of Tennessee, Knoxville. During the third year, a single evaluation contract was developed at BERS, and the private contractor reduced his amount of time to the AAHEP effort. Dr. Lloyd DuVall, the private contractor who had worked with AAHEP since its beginnings, maintained some evaluation responsibility, but was paid as a consultant to the BERS evaluation contract.

Ms. Julie Williams, a member of the evaluation staff in 1983-84, remained part of the evaluation team for 1984-85, thus providing staff continuity. Dr. C. M. Achilles continued in the role of Evaluation Coordinator for BERS. By combining the external (private contractor's) evaluation effort with the BERS contract, there was some cost saving for AAHEP. This saving was important since the AAHEP budget has been reduced and the additional funds could be used for project operation.

AAHEP staff turnover has been significant during the last quarter of the third fiscal year. Dr. Cynthia Norton who assumed directorship of the project in April, 1984 resigned in August, 1985 to accept a teaching position in higher-education. A new director, Dr. Bruce Goodrow, assumed this position. One of the assistant directors resigned in September, 1985; finally, in October, 1985 one of the counselors resigned. At present (11/85) the AAHEP organizational chart is as shown in Figure 2.

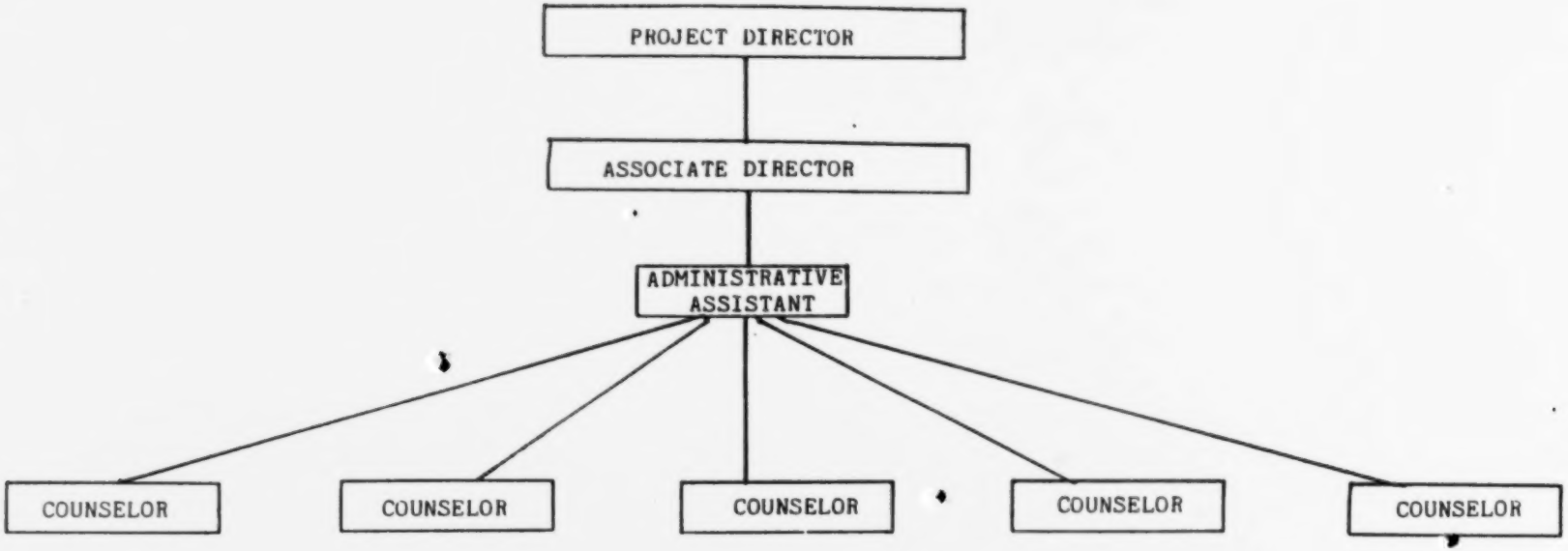

Figure 2. Organizational Chart: AAHEP, 11/85.

With the change of directors came certain program changes and some changes in focus. For example, Dr. Goodrow moved immediately to establish, or re-establish, connections between the AAHEP project and the state of Tennessee's regional health department offices. Futhermore, Dr. Goodrow was concerned about the availability of data from the project's data files and computer, and has felt frustrated by the inability to obtain individual data and to track individual clients (that is, to get a client history in a systematic manner). By 9/85 steps were being taken to improve data entry and access.

The evaluators continued to work with the state personnel to obtain area data on live births and other factors related to the AAHEP project. The evaluators appreciate the conscientious work of state personnel (especially Ms. Bonnie Harrah) in providing the information for the project evaluation.

Based on input from the Evaluators Conference held in Washington, D.C., the evaluators requested data from the state that would allow the development of rates per one thousand as a standard measures of comparison. Those rates per one thousand reflect, verify and extend the findings of the earlier evaluation reports (especially the report of May, 1985).

Plan for Next Year

Based upon evaluation reports, a change of director, and review of AAHEP operations, there have been several recommendations for changes for next year. Those are discussed briefly here.

Several evaluations reports identified the need for improved dissemination of project results. Some progress has been made, and some plans are underway. There will be some radio shows and some articles in area newspapers. A research paper on initial results of AAHEP was presented at the Mid-South Educational Research Association (MSERA) meeting in Biloxi, Mississippi (November, 1985). Figures 5 and 6, pages 23 and 24, show examples both of the concern for teen pregnancy and improved dissemination of information about the teen pregnancy problem.

There is concern about the need for some measurement of attitude change within the population served by the prevention component. There are plans for developing an instrument to determine if there is any attitude change and if so, for measuring this attitude change. There is concern about the collection and use for comparison purposes of such things as

APGAR scores and information on maternal mortality. Some of these adjustments will be made in the project and in the evaluation process.

The data processing equipment at AAHEP needs to be re-programmed so that individual results can be obtained easily. This will provide a client history, and the client history will allow the AAHEP personnel and the evaluators to discuss new factors, such as key cost/benefit issues that may result from the project. Analysis of individual records will allow the project to explore why it is spending certain amounts of money for specific activities and what is the return for these various expenditures. The way the program is currently operating and reporting data, AAHEP can only discuss average costs. It will be beneficial for analysis purposes to be able to use these costs in a more refined manner.

Project personnel are interested in obtaining additional funding for expansion of project activities. To this end a proposal has been submitted to a private foundation by the new AAHEP Director. Results of the evaluation of this proposal will be available soon.

Some equipment and a few supplies have been noted as missing from their storage place in the BERS facility on the University of Tennessee campus. A more thorough inventory and improved security procedures have been initiated to attempt to track the equipment and to avoid any future losses.

Evaluation Results: CARE component.

CARE COMPONENT RESULTS

The primary objective of the care component is as follows:

> To offer care services to a minimum of 80% of all pregnant adolescents in the three target counties served by AAHEP. Care services include activities such as pregnancy counseling, assistance in pre and post-natal care, development of parenting skills, assistance in financial planning and high school completion.

Table 1 shows the potential and actual clients for care in the three target counties for the time 10/1/84-9/30/85. Note that the goal (80% service) was exceeded in one county and that the total number of clients served (n=52) is 78 percent of the 80 percent goal (n=66). During the 1984-85 year, AAHEP staff was most successful in Loudon County where it has reached its goal at the 100% level. In the other two counties the goal was not reached at the 80% level but rather at the 53% level in Scott County and the 64% level in Sevier County. This is in contrast to 1983-84 when AAHEP staff was much more successful in reaching its care component goals

and had the following results: Loudon, 80%; Scott 100%; Sevier 75%. Inability to achieve the 80 percent goal in 1984-85 (the goal was achieved in 1983-84) may be attributed at least partially to the severe winter of 1984 which drastically interfered with travel in the Appalachian sections of the target counties. Care results are also hindered by client reluctance to enter the care system.

TABLE 1
CARE COMPONENT GOALS AND METHOD OF ESTIMATION OF GOALS: 1984-1985

Target Counties	12-month Computations (New clients)			
	Potential		Actual	
	N	80% Goal	N	% of Goal
Loudon	26	21	25	100+
Scott	21	17	20	
Sevier	35	28	31	
Total	82	66	76	

Care services included such things as: counseling, pre-natal care, information on child-care and parenting, introduction to a primary care system (hospital, health clinic), determination of sources of payment for medical services, adoption options, etc. Each care client received extensive, time-consuming, and very personalized services. Over the three years of the project there has been some reduction in low birth-weight babies born to the teenage mothers. (This is a secondary care component goal.) Appendix B contains data on low birth weight babies born to teen mothers in the AAHEP and control regions. These data suggest that AAHEP is also making progress in this area of concern. However, the actual number of care cases is relatively small due to the personal nature of care services.

Table 2 on the following page provides data on the entry characteristics of new clients for the entire AAHEP region and for the three care-service target counties. The data in this table indicate that 235 clients age 17 and less were served in non-target counties, while 124 clients age 17 and less were served in target counties. Of the total number of clients served during this project year (369), 35 percent were from targeted counties (124 of 359) whereas 65 percent were from non-target counties. Characteristics of these new clients indicate that they are

ENTRY CHARACTERISTICS OF CLIENTS, OCTOBER 84-SEPTEMBER 85
CARE COMPONENT

CHARACTERISTICS		Target Counties (Scott, Sevier, Loudon)				Program Total			
		Pregnant	Mothers	Other	Total	Pregnant	Mothers	Other	Total
AGE:	14 or younger	11	2	2	15	32	5	8	35
	15 - 17	86	13	10	109	251	47	26	324
	18 or older	129	12	8	149	151	39	7	197
Previous Pregnancies	None	148		17	165	367		23	390
	One	31	22	3	45	41	44	1	86
	Two or More	47	5		52	45	12		57
Living Arrangements	Alone	26			26	19	11		30
	Husband	88	11	1	100	132	27		159
	Other Male	9			9	7	3		10
	Parent(s)	104	13	16	133	211	36	29	266
	Other	28	1		29	34	7	3	44
School Status	In School								
	7-9	16	2	2	20	43	4	9	56
	10-12 (GED in progress)	53	10	11	74	110	22	18	150
	Grad. (or GED)	76	5		81	97	13	2	112
	Dropout (last grade)								
	9 or below	56	6		62	113	24	4	141
	10-12	73	5		78	118	30	5	153
Welfare Status	Receiving Welfare	43	4		47	106	51	6	163
	Receiving Medicaid	69	7		66	152	13		165
	Baby Only	16	8		24	61	8		69

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primarily between the ages of 15 and 17, have had no previous pregnancies and live with their parents. Characteristically these clients are also attending high school in the 10-12 grade range.

PREVENTION COMPONENT RESULTS

The prevention component has made significant progress in all of the targeted high schools in meeting its two key objectives:

(1) To reach 60 percent of the total school enrollment with at least one significant unit of service

(2) To reach 60 percent of the total students in health classes in the target schools with six significant units of service.

A significant unit of service consists of at least one fifty-minute lecture/discussion session covering material from of the following topic areas: male/female puberty, male/female reproduction, contraception, fetal development, sexually transmitted diseases, decision-making skills and values education.

Table 3 provides data reflecting the progress made toward reaching the preceding objectives. Note that both objectives have been reached in five of the seven high schools, and overall. Within the total service group, there are 5967 students enrolled in the seven target high schools and AAHEP has reached 4278 of these, or 72%. Similarly, the total number of students enrolled in health classes in the seven schools is 1736 and AAHEP has reached 1380 or 75% which is 15% above the stated objective (60%).

Consistent with predetermined project goals, the prevention component staff spent the largest portion of their time working in the five primary counties providing a variety of services to targeted students. Table 4 is a sample of some of the major activities of the prevention counselors during the 1984-1985 project year. Consistent with the data presented in the Second Year Evaluation Report, these activities were lecturing, lecture preparation, research and information gathering, staff training and transportation.

Another important AAHEP objective was as follows:

To demonstrate a decline in the incidence of adolescent pregnancies within the AAHEP target counties relative to the number of years of AAHEP activity.

TABLE 3
PRIMARY PREVENTION TARGET SITES:
SIGNIFICANT UNITS OF SERVICE
FOR TOTAL SCHOOL ENROLLMENT
AND HEALTH ENROLLMENT
October, 1984 - September, 1985

TARGET SCHOOL SITES	TOTAL SCHOOL ENROLLMENT ONE SIGNIFICANT UNIT				TOTAL HEALTH ENROLLMENT SIX SIGNIFICANT UNITS			
NAME	# Enrolled	60% Goal	# Reached	% Reached	# Enrolled	60% Goal	# Reached	% Reached
Sevier County High	1256	753	980	78	498	298	321	57%
Seymour High School	568	341	353	38	151	91	118	57%
Anderson County High	982	589	756	77	316	190	316	100%
Clinton Sr. High School	960	76	682	71	290	174	290	100%
Rutledge High School	723	433	549	76	177	106	177	100%
Loudon County High School	574	344	517	90	57	34	57	100%
Lenior City High School	904	564	578	64	247	148	170	69%
Totals	5967	3580	4278	72	1736	1042	1380	79%

TABLE 4

SELECTED AAHEP ACTIVITIES OF PREVENTION COUNSELORS, 10/84 - 9/85 BY PRIMARY COUNTIES AND OTHER COUNTIES

	Number of Sessions		
Activity	Primary	Non-Primary	Total
Outreach	316	76	392
Individual Counseling	331	43	374
Group Counseling	273	78	351
Lecturing	1565	432	1997
Follow Up/Follow Through	261	74	335
Referral Work	74	20	94
Providing Supervision	21	7	28
Coordination of Volunteers	33	6	39
Assisting Professionals	468	103	571
Special Events	16	3	19
Resource Distribution	136	38	174
Lecture Preparation	783	191	974
Residential Visits	56	10	66
Transportation	730	183	913
Staff Training or Supervision	458	103	571
Research and Information Gathering	502	93	595

Table 5 provides data on the rates per 1000 live births in the total 15-county area, the 5 target counties, 10 non-target counties and 3 control counties from 1980 to 1984. Data indicate that teen birth rates in target counties have declined from 24.3 in 1982 when AAHEP began to 19.7 in 1984, a decline of 4.6 births/1000 females aged 11-18. In the non-target counties the decline was only 1.6 (26.6 to 25.0); in the control counties there was an increase of 1.4 births per 1000 females, 11-18 (24.7 to 26.1).

Project staff computed a baseline for comparison purposes. (The rate per 1000 for the two-year period 1980, 1981.) These baseline rates appear at the top of Table 5. Using the baseline rates for comparison, the comparison counties decreased only slightly from 26.6 to 26.1. The AAHEP area showed considerably better decreases; the target counties led the decrease by a considerable margin.

	5-County	10-County	Total	Comparison
Base	25.8	28.5	27.6	26.6
1984	19.7	25.0	23.3	26.1
Decrease	6.1	3.5	3.3	.5

Figure 3 shows the overall pattern of births to mothers ages 12-19 in the total 15-County AAHEP area. Most reporting in this evaluation is for 11-18, and the 11-18 results are better than the 12-19 results. There is, however still a continuing decline even for the 12-19 age group since the start of AAHEP.

As part of the evaluation attempt to show the benefit of AAHEP to individuals, a relative risk rate has been compiled for each individual county and/or for each group of counties featured in the evaluation. An individual risk rate ratio will identify the probability that any particular individual teenager will become pregnant. This rate can be displayed several ways. First, each succeeding year can be computed against the baseline (the average of 1980 and 1981 years); it can be compared to the control county rates for corresponding years. That information appears in Appendix C.

Appendix C shows that the "risk" for a teenager becoming pregnant decreased in the 15-county AAHEP area (27.61 at base to 23.29 in 1984, or a ratio of .84) but remained very stable in the three control counties (26.58 at base to 26.10 in 1984, or a ratio of .98). Column C shows that considerable declines (.10 or more) occurred in 11 of 15 AAHEP counties (73%) but only in 1 of 3 (33%) control counties. Four of five target

TABLE 5
RATES PER 1000 LIVE BIRTHS AND BASELINE RATES IN FIVE TARGET COUNTIES, TEN NON-TARGET, FIFTEEN TOTAL AND THREE CONTROLS, 1980-1984

Baseline Rates 1980-1981 (Based on Actual Numbers)

Five Target Counties	25.8
Ten Non-Target	28.5
Fifteen Counties	27.6
Control Counties	26.6

Five Target Counties

	1980	1981	1982	1983	1984
Total Population	11,737	11,614	11,520	11,424	11,327
Total Births	293	308	280	254	223
Rate/1000 Births	25.0	26.5	24.3	22.2	19.7

Baseline Population - 11,676
Baseline Births - 301

Ten Non-Target Counties

	1980	1981	1982	1983	1984
Total Population	24,697	24,491	24,305	24,113	23,921
Total Births	717	685	648	569	598
Rate/1000 Births	29.0	28.0	26.6	23.6	25.0

Baseline Population - 24,594
Baseline Births - 701

Fifteen Counties

	1980	1981	1982	1983	1984
Total Population	36,434	36,105	35,825	35,537	35,248
Total Births	1,010	993	928	823	821
Rate/1000 Births	27.7	27.5	25.9	23.2	23.3

Baseline Population - 36,270
Baseline Births 1,002

Control Counties

	1980	1981	1982	1983	1984
Total Population	4,375	4,354	4,332	4,311	4,292
Total Births	124	108	107	112	112
Rate/1000 Births	28.3	24.8	24.7	25.9	26.1

Baseline Population - 4,365
Baseline Births - 116

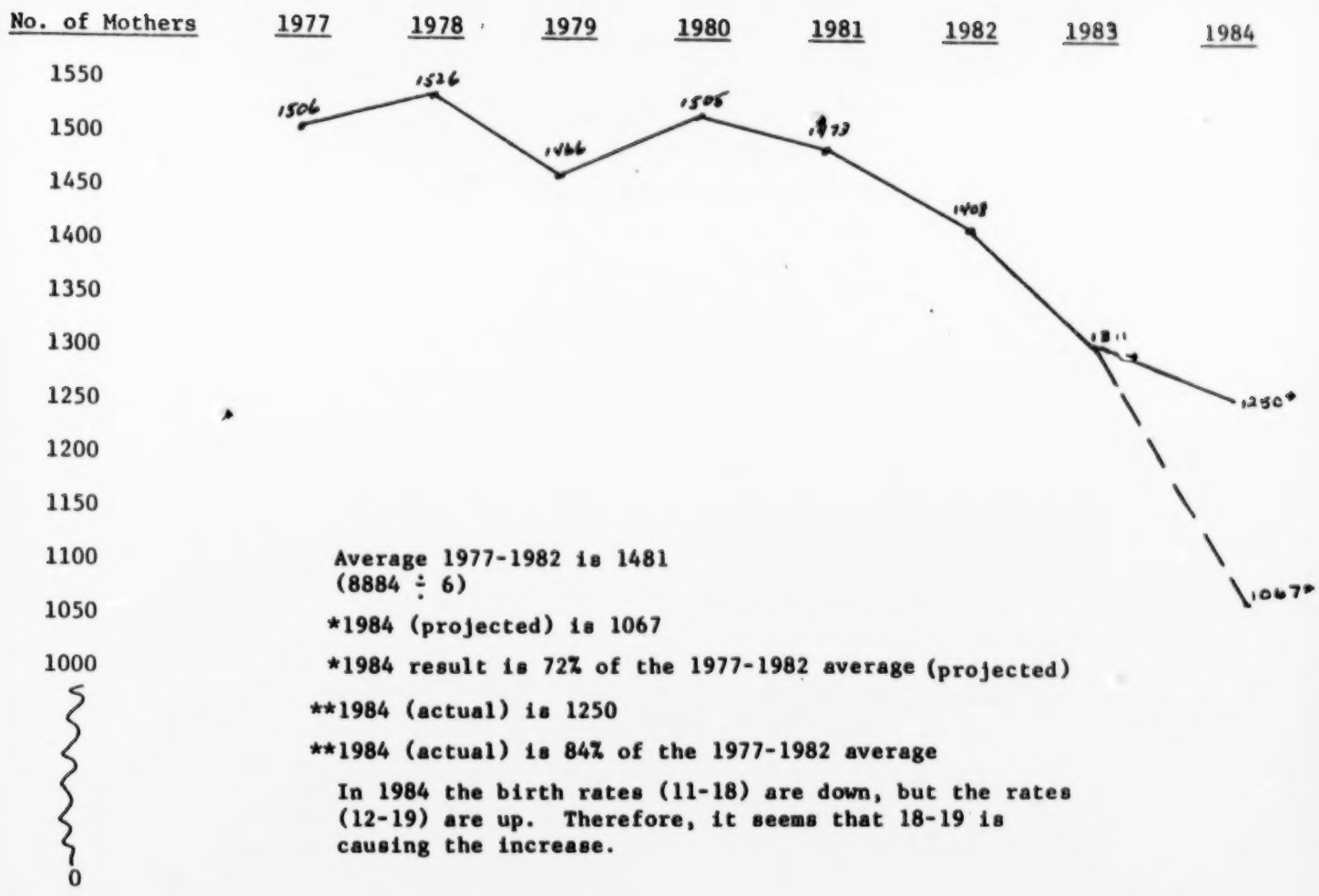

Figure 3. Graph of Number of Mothers Ages 12-19, 15 Counties AAHEP Area, 1977-1984 (see also Appendix B)

counties recorded reductions ranking among the best of the reductions (.72, .80, .61 and .82). Column D shows the relationship of each county to the rate for the 15-county area at baseline, and Column E shows each county's relationship to the 15-county rate in 1984. A decline from column D to column E shows an absolute gain within the 15-county area. There are eight declines from column D to column E, and the five target counties accounted for 4 of the 8. Columns F and G show individual county relationships to the total rates for the control counties for base and 1984. Nine of 15 AAHEP counties exceeded the control base rate (Col. F) but only 4 of 15 AAHEP counties (and none of the target counties) exceeded the control rate in 1984 (Col. G). Columns H-K provide similar comparisons for the control counties. Table 6 is a summary of 1984 data. (Appendix C shows the similarity of control counties and AAHEP at baseline: 1980-81).

Table 6

Target Counties (5)	Rate/1000	19.7	Relative Risk = 1.00
Non-Target Counties (10)	25.0		= 1.27
All Counties (15)	23.3		= 1.18
Control Counties	26.1		= 1.32*

Adolescents residing in Control counties have an increased risk of .32 compared to AAHEP target counties.

MANAGEMENT and GENERAL

At the end of the 1983-84 project year, AAHEP staff developed goals, objectives and activities for 1984-85. These goals, etc. were somewhat (but not drastically) different from those for the first two years and have evolved from experience and changes in project emphasis. The revised (1984-85) goals, objectives and activities appear in Appendix A[2].

ISSUES and DISCUSSION

At the end of its third year, AAHEP is making considerable progress. AAHEP staff are working to overcome several difficult problems. There have been some notable accomplishments. This section provides a listing and discussion of some key points.

[2]As previously noted, the AAHEP staff developed several hypotheses from the objectives depicted in Appendix A. These hypotheses and the results of the 1984-85 project year depicted in Figure 4.

Problems/Hinderances To Goal Achievement

1. AAHEP counselors continued to have difficulty in establishing a reciprocal relationship with several of the local county health departments. The interactions are presently being disucssed with the Regional Health Director and other key personnel.

2. Service delivery in rural locations is fragmented and lacks continuity. A greater emphasis must be placed on interagency cooperation with a more complete referral follow-up. Often a referral is made by an AAHEP counselor and from that point return information is almost nonexistent. Extra time must be spent by AAHEP personnel in order to contact the client for information that should be readily exchanged between various human service providers.

3. Very few referrals are being directed to AAHEP from other human service programs. More effort must be made to develop a professional respect between agencies. In many instances a sense of competition exists where there should be an atmosphere of mutual cooperation for the overall welfare of the client.

4. Prevention services operated at a reduced rate over the summer months due to summer vacations in the public schools. As of September 5 all prevention activities were in full operation again.

5. Counselor turnover has stabilized somewhat from the experience of the past several years, but the funding uncertainty for future operation continues to encourage counselor attrition into positions with greater career stability.

6. Each time a counselor resigns the period required to train a replacement results in a lower level of service delivery. Efforts must be made to reduce counselor attrition.

7. Changes in counselors and administration at various schools in target counties slowed AAHEP progress.

8. The unavailability of resources such as filmstrips and equipment in some of the more rural counties required additional work time to be spent in arranging for resources to be transported to the county for use by the counselor.

9. Not being a resident of the county has been an obstacle for some counselors for several reasons: 1) county natives do not easily accept outsiders; 2) familiarizing oneself about the county requires considerable time, and 3) travel to and from the county is both time-consuming and exhausting. Efforts are currently being made to employ county residents whenever qualified candidates can be identified.

Dissemination

In response to a need to disseminate more information concerning AAHEP's progress (See First and Second-Year Evaluation Reports) project personnel have recently been successful in preparing a paper which was selected for presentation at the National Alcoholism Forum. Brenda Owensby, the AAHEP Associate Director, wrote the paper entitled "Alcohol and the Pregnant Adolescent" which was selected for presentation at the Annual Conference of the National Council on Alcoholism on April 18-21, 1985 in Washington, D.C. The AAHEP Project Director presented the paper at the conference before a large group. As previously noted, a paper on initial results of AAHEP was also presented in November, 1985 at the Mid-South Educational Research Association meeting in Biloxi, Mississippi.

In their effort to increase dissemination of project services and information the AAHEP staff also presented materials to a variety of agencies, schools and county officials. The following is a list of these activities.

Dissemination Activities

Sevier County High School Teachers
Sevierville, TN

Professional Seminar for School Counselors
Lenningrad, USSR

Department of Human Services
Child Protective Services

Special Education Teachers
Scott County

Career Education Students
Scott County High School

Wartburg Central High School
Wartburg, TN

Sevier County High School
Sevierville, TN

Carson-Newman College
Jefferson City, TN

Women's Health Class
U.T. HPER Building

Dr. Fox
Home Ec. Building, UTK

East TN Educational Association
Holiday Inn-Knoxville

Sevier County Vocational School
Sevier County

Westhills Baptist Church
Knoxville, TN

Loudon County High School
Loudon, TN

Lenoir City High School
Lenoir City, TN

Rutledge High School
Rutledge, TN

Scott County High School
Huntsville, TN

Jetsetters Homemakers Club
Oneida, TN

Southeastern Family and Child Symposium
Knoxville, TN

Harriman Occupational High School
Harriman, TN

Roane County Vocational Center
Midtown, TN

Private Industry Council
Kingston, TN

Mayor Ruby Luckey
Kingston, TN

Appalachian Educational
Opportunity Center
University of Tennessee

Other General Accomplishments

AAHEP has had many accomplishments to date. Some have been mentioned in prior sections, especially those accomplishments that relate directly to the CARE and PREVENTION components. Other, more general accomplishments are:

1. The number of requests from county school systems for AAHEP personnel to provide prevention services continues to increase. Counselors have established professional credibility in most of the educational systems within the target region.

2. AAHEP counselors continue to serve on interagency councils, advisory boards, and committees in their respective counties. This visibility provides opportunities to disseminate information about AAHEP.

3. AAHEP counselors were involved in a state-wide campaign to reduce teen pregnancies. "Get The Facts" was initiated on October 2, 1985 with a state-wide audience.

4. AAHEP has steadily improved relations with the staff at Tennessee Regional Department of Health and Environment. A joint public awareness campaign is currently underway to focus on adolescent pregnancy.

5. Negotiations are underway to share audio-visual resources with local health department personnel for mutual use by clients residing in the target areas.

6. Office spaces in county health departments are being arranged so that central points within target county areas may be used for equipment storage and client counseling in a health care setting.

7. AAHEP resource materials have reached approximately 12,221 students so far this year.

Figure 4 on the following pages shows each of the AAHEP hypotheses and a brief, general statement regarding the accomplishment of each hypothesis. This summary statement has been derived after a review of all AAHEP data to date and represents the evaluators' assessment of AAHEP accomplishments in relation to the hypotheses.

CONCLUSIONS

During its three years of operation, the AAHEP has undergone a variety of changes in operational procedures, staff members and plans for evaluation. The project staff currently works intensively in five target counties to provide both care and prevention services. Because of previous obligations, the AAHEP staff also works in 10 non-target areas, although these services are provided on an "as available" basis.

The evaluators have modified their evaluation design as the project implemented changes suggested by the Washington D.C. office. The current format of the evaluation design allows comparisons to be made among target, non-target and control counties to address AAHEP's success in meeting the stated goals and objectives.

The AAHEP project has had outstanding success in meeting its prevention goals and considerable success in meeting its care component goals. In particular, AAHEP services appear to have reduced the incidence of adolescent births to a larger degree in counties where service has been more intense (target counties). This suggest that AAHEP is functioning successfully to prevent adolescent pregnancy, which has been identified as a major health and social problem in the mid-South region.

Figures 5 and 6 are newspaper accounts explaining details of the teen pregnancy problem. These types of data support the need for AAHEP, and results of this evaluation show that AAHEP is helping to decrease these high rates. The AAHEP strategies, specially of delivering prevention services through schools, may be worthy of replication.

HYPOTHESES	RESULTS (General Narrative)
H.1. Duration of the project, staff development, and implementation of electronic procedures (mini-computer) will improve the AAHEP management procedures as shown by (1) availability of data, (2) recency or currency of data, (3) ease of reporting and access, and (4) amount and sophistication of dissemination activities.	Continuing work on "debugging" the various programs. Basic quantitative data are available, but AAHEP hopes to have more refined data for future reports. Dissemination activities through professional meetings, workshops and conferences. There have been several important newspaper articles and features on teen pregnancy. These should help AAHEP, especially in its prevention activity and in gaining an entry in schools. See Figures 5 and 6.
H.2. Given the necessary resources, AAHEP will provide prevention services to a minimum of 60% of all targeted adolescents (specifically, those in the three target school sites who have teenage pregnancies).	See Table 3, p. 11. Prevention services were provided to 72% of all students in the targeted high schools and 75% of all students enrolled in health classes, thus greatly exceeding their 60% goal.
H.3. Within the AAHEP service area there will be a decline in teenage pregnancies (based on baseline data of state of Tennessee). This decline will be related to the number of years of AAHEP activity within the region.	See Table 5, p. 14; Table 6, p. 17; see Figure 3, p. 15. AAHEP appears to have reduced the incidence of adolescent births to a larger degree in target counties where service has been more intense than it has in the other 10 counties, and especially more than in the 3 "control" sites.

Figure 4. Summary of Results Related to Each Hypothesis

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HYPOTHESES	RESULTS
H.4. Given adequate resources and procedures for identification, AAHEP will offer their care services to a minimum of 80% of all pregnant adolescents in the three target counties served by AAHEP.	See Table 1, p. 8; Table 2, p. 9. Care goals were reached in Loudon County. Care goals were reached at the 53% level in Scott County and 64% level in Sevier.
H.5. Within the AAHEP service region, and specifically within the target or primary counties, the percentage of low birth-weight births to teenage mothers will decline relative to the percentage within the state of Tennessee (or relative to similar counties).	See Appendix B. Data suggest that percentage of Low Birth-Weight babies has declined.

Figure 4. Summary of Results Related to Each Hypothesis.

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NASHVILLE TENNESSEAN P.6A 11/23/85

The problem of teen pregnancy

THIS week, *The Tennessean* is running a special series on an all too common topic — teenage pregnancy.

Two reporters, Ms. Renee Vaughn and Ms. Laura Milner, have spent the last few weeks interviewing health care professionals, educators, and community activists. They have examined the statistics on teenage pregnancy in Tennessee and in the United States, and reviewed the various agencies that provide information or help to pregnant teens. They have also talked with many of the young girls who make up those statistics.

Currently, 45 teens get pregnant every day in Tennessee. Half of those pregnancies end in abortion; 46% of the girls who give birth will be unwed, and 80% will drop out of school. It is not uncommon for 14- and 15-year-olds to get pregnant. Last year, four 11-year-old girls gave birth in Davidson County.

Those statistics are undoubtedly disconcerting to parents and educators, but they also should concern the public and public officials. After all, how many of those unwed teenage mothers or their babies are going to suffer health problems because of poor prenatal care and diet? How many of those uneducated mothers are going to depend on public assistance for housing, food, and other necessities? And how can an unwed, uneducated mother ever offer her children a chance for a better life?

The high numbers of pregnant teens might be surprising, given that today's young teenagers are generally considered to be the most sophisticated, best educated, most mature generation ever.

But for all their maturity — either real or imagined — they are still children. Many of them believe their peers more than their parents. Some just block out what they don't want to hear, and others literally don't know what they are doing. And while they might think that having sex is a grownup thing to do, they are often not grown up enough to face the consequences.

There are many agencies in Nashville that deal with teenage pregnancy on different levels — some by offering free or inexpensive pre-natal care, adoption counseling, birth control or abortion services. Every one of those services provides a necessary, valuable service to this community. Every pregnant teenager, her boyfriend, and their parents have some tough, personal questions to answer, and there is no absolute right and wrong for every situation.

Before teenagers can get the information they need to make responsible decisions, their parents and the public must first be responsible. Teenagers who have sexual relations with no thought about pregnancy are uninformed and careless. But parents and educators who ignore children's sexuality are being hopelessly naive. ♦

Figure 5. Recent Newspaper Article on Teen Pregnancy in Tennessee.

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Teen pregnancy rate down, still double other countries

Gannett News Service

WASHINGTON — The rate of teen-age pregnancy in the United States decreased over the past 20 years, but rates for blacks are a third higher than for whites and overall U.S. statistics are more than double those of other developed countries, a panel of experts testified at a congressional hearing Tuesday.

A new, 18-month study by the Alan Guttmacher Institute showed teen birth rates here twice as high as Canada, England and Wales, three times as high as Sweden, and seven times higher than the Netherlands, said research director Jacqueline Darroch Forrest.

All five have more public sex education programs and easily available contraceptives — and all five also have much lower teen abortion rates, she said.

"One of the lessons we can learn from these other countries is that we can lower the abortion rate as well," said Forrest.

Forrest said the study shattered several other myths about teen pregnancy:

■ All five other countries have more generous welfare benefits, showing that alone doesn't encourage early pregnancy.

■ Teen pregnancy rates were lowest in countries with greater availability of contraceptives and counseling, as well as sex education in schools. One month of the pill here costs about $10. In France, it's $1 or less, she said.

■ The U.S. rate is not a black or hispanic phenomenon, since white rates alone outstrip total rates for the other nations.

■ Young teen-agers are not too immature to use contraceptives, especially the pill, which is used much more frequently abroad than in the United States.

■ Almost three-fourths of the American teens who get pregnant say the child is unwanted. Half opt for abortions. One-third of the 13 million abortions since 1973 were performed on girls 12-19.

Many points in the study were echoed by Wendy Baldwin, chief social demographer of the National Institute of Child Health and Human Development.

She said there is no evidence sex education encourages activity, and some evidence it prevents unwanted pregnancy. Teens are least likely to use contraceptives when first beginning sexual activity, when they are most at risk. Information from parents is of little help; she said most parents know little more about sex and sexuality than their children.

The impact of teen pregnancies — 270,000 births to unwed teens in 1982 — is a serious health problem, said Rep. Henry Waxman, D-Calif., of the subcommittee on health and the environment, who called the meeting with Rep. Robert Garcia, D-N.Y., of the subcommittee on census and population.

The maternal death rate for teen mothers is more than twice that of women in their 20s — and their babies are twice as likely to die, or have health problems.

Teen mothers may go back to school, but they never catch up educationally with girls who waited to have children. Teen fathers find themselves lagging behind their peers in income 10 years later. Parents often take over support and care of the "babies who have babies." Seventy percent live with parents at time of childbirth; five years later, more than a third are still at home.

Telling young people to postpone sex is not enough, said Rep. James H. Scheuer, D-N.Y.

He said 80-90 percent of Catholics and Protestants approve giving contraceptive information to teens. "Among all religious groups, the people are ahead of the leaders," he said.

"That's a fact lawmakers haven't absorbed yet."

References

The following reports have been compiled and submitted by AAHEP Evaluators.

DuVall, L. A., Campbell, E. L., Achilles, C. M., (1983). Appalachian Adolescent Health Education Project (AAHEP): Interim Evaulation Report, Knoxville, TN: Bureau of Educational Research and Services (BERS), College of Education, University of Tennessee ,(May).

DuVall, L. A., Achilles, C.M., Casavant, P. and Stevens, B., (1983). Appalachian Adolescent Health Education Project (AAHEP): First-Year Evaluation Report. Knoxville, TN: Bureau of Educational Research and Services (BERS), College of Education, University of Tennessee, (November).

Achilles, C. M., Williams, J. E., DuVall, L. A., (1984) Appalachian Adolescent Health Education Project (AAHEP): Interim Evaluation Report. Knoxville, TN: Bureau of Educational Research and Services (BERS), College of Education, University of Tennessee, (May).

Achilles, C. M., Williams, J. E., DuVall, L. A., (1984). Appalachian Adolescent Health Education Project (AAHEP): Second-Year Evaluation Report. Knoxville, TN: Bureau of Educational Research and Services (BERS), College of Education, University of Tennessee, (December).

Williams, J. E., Norton, C. and Achilles, C. M., (1985). "Appalachian Adolescent Health Education Project (AAHEP) Evaluation: A Study of Teen Pregnancy in East Tennessee (1982-1985) Paper at MSERA, Biloxi, MS, (November).

OAL/OBJ.	ACTIVITIES	DATA NEEDS OR SOURCES/RESULTS
OAL I: MANAGEMENT o assess and improve AHEP operation.		
BJ. I.1. To improve he management nformation system.	a. Further implement and refine the management information system. b. Maintain accountability of funds and property. c. Refine operational design of the project. d. Provide ongoing staff development.	
BJ. I.2. To evaluate nd assess the overall nctioning of AAHEP.	a. Contract with an independent evaluator. b. Meet with and provide information to evaluators regularly. c. Continue an internal evaluation of individual staff performance.	
J. I.3. To dis-minate information out AAHEP and lated issues.	a. Publish information formally and/or informally. b. Develop and participate in work-shops and professional meetings. c. Present project information to governing boards.	

Appendix A-1. 1984-85 AAHEP Goals, Objectives and Activities to Guide Project Efforts.

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GOAL/OBJ.	ACTIVITIES	DATA NEEDS OR SOURCES/RESULTS
OBJ. I.4. To generate the resources needed to continue AAHEP services.	a. Continue to increase volunteer participation. b. Initiate relationships with interested funding sources. c. Submit application to funding sources appearing most receptive to AAHEP needs.	
GOAL II: CARE To achieve positive outcomes for mother and child once pregnancy occurs.		
OBJ. II.1. To coordinate available care services to maximize impact of existing programs.	a. Develop Advisory Boards in target counties. b. Participate in interagency councils. c. Provide outreach presentations as requested concerning multifaceted problems of teen pregnancy and importance of networking in community. d. Refer individuals, when appropriate, to available agencies providing core care services.	
OBJ. II.2. To offer services to a minimum of 80% of all pregnant adolescents.	a. Determine approximate number of adolescents who would be pregnant in each quarter of the year based on previous year's statistics. b. Identify adolescents through schools, churches, health/community agencies, self-referrals, etc. c. Offer services to all identified pregnant adolescents.	

Appendix A Continued

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GOAL/OBJ.	ACTIVITIES	DATA NEEDS OR SOURCES/RESULTS
OBJ. II.3. To continue to arrange for appropriate utilization of prenatal/ postnatal services by adolescents regardless of their proximity to available services.	a. Initiate contact with client within one week of referral. b. Assist pregnant adolescent in receiving prenatal care no later than 3 weeks from initial client contact. c. Discuss parenthood preparation and/or adoption process. d. Prepare adolescent for delivery by: assisting in developing financial resources, encouraging childbirth classes participation or discussing delivery procedures, explaining what materials are necessary for hospital delivery procedures, explaining what materials are necessary for hospital stay, discussing arrangements for transportation and post-delivery plans.	
OBJ. II.4. To continue involvement with adolescent to enhance outcome for mother and child.	a. Encourage parenting skills development. b. Encourage proper infant health care. c. Encourage family planning. d. Encourage high school completion. e. Encourage adult self-sufficiency.	

A-3

Appendix A Continued

GOAL/OBJ.	ACTIVITIES	DATA NEEDS OR SOURCES/RESULTS
GOAL III: PREVENTION To reduce adolescent pregnancy and delay adolescent sexual relations.		
OBJ. III.1. To coordinate available prevention services to maximize impact of existing programs.	a. Participate in interagency councils and/or Advisory Boards addressing prevention services. b. Provide teacher inservice programs and workshops in target sites. c. Initiate a system to identify adolescents who became pregnant and had been served in the prevention component. d. Refer individuals, when appropriate, to available agencies providing core prevention services. e. Provide outreach and consultation to religious organizations.	
OBJ. III.2. To provide services to a minimum of 60% of all targeted adolescents (total school enrollment) with one significant unit of service.	a. Determine adolescents targeted to receive prevention services. b. Develop methods for reaching 60% of the targeted adolescents. c. Provide education to targeted adolescents concerning sexuality and parenthood responsibilities.	

Appendix A Continued

OAL/OBJ.	ACTIVITIES	DATA NEEDS OR SOURCES/RESULTS
BJ. III.3. To make dditional resources vailable to ado-escents, families, rofessionals and nterested community embers.	a. Develop concise teaching guides addressing such topics as: adoption, decision-making skills, assertiveness training, communication skills, adolescent development, sexual responsibility, parenting, etc. b. Present developed guides or provide for presentations by volunteers. c. Distribute and/or loan pamphlets, books, audio-visual materials and other prevention materials.	
BJ. III.4. To increase family involvement in prevention services.	a. Encourage parental involvement in all prevention services. b. Establish parent groups. c. Establish parent/adolescent workshops. d. Encourage open lines of communication between adolescents and parents.	
J. III.5. To reach % of students in alth classes in rget schools with significant units.	a. Work through health classes. b. Present materials or work with teachers to help them prepare lessons.	

Appendix A Continued

TABLE 7

Number of Abortions, Live Births and Fetal Deaths of Mothers Aged 12-19, 15 Counties of AAHEP, By County, (1980-1985)

County	Number of Abortions								Number of Live Births								Number of Fetal Deaths							
	80	81	82	83	84	85	86	87	80	81	82	83	84	85	86	87	80	81	82	83	84+	85	86	87
Anderson	94	82	86	79	76				158	155	143	140	109				2	0	0	3				
Blount	106	104	95	92	95				181	186	163	158	152				0	0	1	0				
Campbell	28	21	20	18	19				146	126	136	130	118				2	0	0	2				
Claiborne	9	17	12	11	10				67	62	72	73	66				1	0	0	0				
Cocke	32	34	42	31	31				103	100	100	90	88				4	1	0	0				
Grainger	19	11	11	12	7				46	55	48	42	39				0	1	0	0				
Hamblen	60	56	63	58	49				141	148	137	113	107				1	2	0	0				
Jefferson	39	43	42	35	27				91	69	70	76	77				0	0	0	0				
Loudon	30	28	42	41	34				68	62	69	64	60				0	0	1	0				
Monroe	36	30	26	35	28				112	90	100	79	94				0	1	0	1				
Morgan	10	4	13	6	6				57	60	56	43	46				1	0	0	1				
Roane	56	54	48	50	47				125	134	104	104	116				1	1	2	1				
Scott	10	11	7	5	6				74	81	56	80	56				0	2	1	0				
Sevier	69	50	55	54	42				99	107	117	81	95				1	2	1	1				
Union	7	5	8	11	5				37	38	37	38	27				1	0	0	0				
Total	605	550	570	538	482				1505	1473	1408	1311	1250				14	10	6	9				

+No data available

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APPENDIX B

APPENDIX B

SUMMARY: BIRTHS AND LOW BIRTH WEIGHT (LBW) BABIES TO TEEN (12-19) MOTHERS IN 3 CONTROL COUNTIES AND AAHEP AREA BY TOTAL, PRIMARY AND NON-PRIMARY COUNTIES

	1980	1981	BASE	1982		1983		1984		1985		1986		1987	
				N	%	N	%	N	%	N	%	N	%	N	%
Control (3)															
Births	191	172	181	173	96	160	88	164	91*						
LBW	11	15	13	17	131	17	131	12	92*						
AAHEP															
Births (total)	1505	1473	1489	1403	94	1311	88	1067	72*						
Primary (5)	445	460	452	433	96	407	90	321	71*						
Non-Primary (10)	1060	1013	1036	970	94	904	87	746	72*						
LBW (total)	121	127	124	135	109	117	94	94	76*						
Primary (5)	37	35	36	38	106	33	92	38	106*						
Non-Primary (10)	84	92	88	97	110	84	95	56	66*						

BASE = 1980 + 1981 ÷ 2
% = Percent of BASE

CONTROL: Three similar counties: Hancock, Hawkins, Polk
AAHEP: Primary Counties (5); Non-Primary (10); Total = 15

NOTE: AAHEP began operation in Fall, 1982; AAHEP divided area into Primary/Non-Primary in Early 1984.

* 1984 Figures are estimates.

APPENDIX C

"Risk Ratio" Computations: AAHEP, 1980-1984
Relative to Teenage Pregnancy, Baseline to 1984

County	Rate/1000			Individual Risk Ratios			
	A	B	C	D	E	F	G
	Baseline	1984	1984÷Base A÷B	Base÷Tot. (27.61)	1984 (23.29)	Base (26.58)	1984 (26.10)
* 1. Anderson	23.82	17.22	.72	.86	.74	.90	.66
2. Blount	23.87	20.73	.87	.86	.89	.90	.79
3. Campbell	36.67	28.73	.78	1.33	1.23	1.38	1.10
4. Claiborne	22.88	20.43	.89	.83	.88	.86	.78
5. Cocke	35.69	32.17	.90	1.29	1.38	1.34	1.23
* 6. Grainger	26.78	21.31	.80	.97	.91	1.01	.82
7. Hamblen	27.52	21.03	.76	.99	.90	1.04	.81
8. Jefferson	23.55	24.85	1.06	.85	1.07	.87	.95
* 9. Loudon	19.35	20.30	1.05	.70	.87	.73	.78
10. Monroe	32.96	33.32	1.01	1.19	1.43	1.24	1.28
11. Morgan	32.82	26.29	.80	1.19	1.13	1.23	1.01
12. Roane	26.86	24.76	.92	.97	1.06	1.01	.95
*13. Scott	32.82	22.50	.61	1.33	.97	1.38	.86
*14. Sevier	25.07	20.69	.82	.91	.89	.94	.79
15. Union	32.38	25.51	.79	1.17	1.09	1.22	.98
16. Total	27.61	23.29	.84	1.00	1.00	1.04	.89

Baseline is combined 1980-1981 teen pregnancy rate/1000				H Base (15) (26.58)	I 1984 (15) (26.10)	J (27.61)	K (23.29)
17. Hancock	31.58	30.63	.97	1.19	1.17	1.14	1.32
18. Hawkins	23.40	24.64	1.05	.88	.94	.85	1.06
19. Polk	33.54	28.33	.84	1.26	1.09	1.21	1.22
20. Total	26.58	26.10	.98	1.00	1.00	.96	1.12

*Target Counties

Risk Ratio (Total) 15 Co.÷Control. Base=1.04 (27.61÷26.58); 1984=.89 (23.29÷26.10). Base to 1984 Change in Risk Ratio: Control (.98) (26.10÷26.58); 15 Co. (.84) (23.29÷27.61).

A=1980-81 Combined Rate/1000
B=1984 Rate/1000
C=1984 Rate Divided by Base (A÷B)
D=Base (Col. 1) for Each Co.÷Base for 15 Co. (Line 16, Col. A:27.61)
E=1984 (Col. B) for Each Co.÷1984 Tot. for 15 Co. (Line 16, Col. B:23.29)
F=Base (Col. A) for Each Co.÷Base for 3 Control Co. (Line 20, Col. A:26.58)
G=1984 (Col. 13) for Each Co.÷1984 Tot. for 3 Control Co. (Line 20, Col. 13:26.10)
H=Base (Col. A) for Each Control÷Base for 3 Control Co. (Line 20, Col. A:26.58)
I=1984 (Col. A) for Each Control÷1984 Tot. for 3 Control Co. (Line 20, Col. B:26.10)
J=Base (Col. A) for Each Control÷Base for 15 Co. (Line 16, Col. A:27.61)
K=1984 (Col. A) for Each Control÷1984 for 15 Co. (Line 16, Col. B:23.29)